# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:

Renergy, Inc. 461 OH-61 Marengo, Ohio 43334

**ATTENTION:** 

Cari Oberfield Chief Operating Officer cdoberfield@renergy.com

# Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Renergy, Inc. (Renergy or you) to submit certain information about the facilities at 1146 Herr Road, Fairborn, Ohio (Dovetail), 2279 County Road 156, Cardington, Ohio (Emerald), and 2133 Township Road 224, Ashley, Ohio (Steamtown). Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Enforcement and Compliance Assurance Division, Region 5.

Renergy owns and operates an anaerobic digester with a flare and a spark ignition internal combustion engine at both its Fairborn, Ohio and Cardington, Ohio facilities; Renergy owns and operates sludge lagoons at its Fairborn, Ohio, Cardington, Ohio, and Ashley, Ohio

facilities. We are requesting this information to determine whether you are complying with your federally enforceable Permits-to-Install and Operate and the Ohio SIP.

At this time, EPA Region 5 is not accepting any hard-copy document deliveries. If possible, we ask Renergy to upload all required information to the secured web-link shared with you at the time you received this request. If you did not receive a web-link, or if you are having technical difficulties, you must contact Natalie Schulz at schulz.natalie@epa.gov or 312-886-2776 to make arrangements to submit your response.

Renergy must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1519.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice.

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Renergy to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Natalie Schulz at 312-886-2776 or schulz.natalie@epa.gov.

Michael D. Harris
Division Director
Enforcement and Compliance Assurance
Division

# Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

#### **Instructions**

- 1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
- 2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
- 3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
- 4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
- 5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
- 6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

#### **Electronic Submissions**

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

- 1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
- 2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

- 3. Provide submission to the secure web-link provided by EPA.
- 4. Provide a table of contents of all electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number.
- 5. Please submit documents claimed as confidential business information (CBI) in separate file folders apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI.
- 6. Certify that the attached files have been scanned for viruses and indicate what program was used.

### **Definitions**

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq.*, or Ohio Administrative Code Rule 3745-15-05 "De Minimis" air contaminant source exemption.

- 1. "Potential to Emit" shall mean the amount of emissions of an air contaminant which would be emitted from a source during a twenty-four hour calendar day or calendar year basis, whichever is applicable, if that source were operated without the use of air pollution control equipment unless such control equipment is, aside from the air pollution control requirements, necessary for the facility to produce its normal product or is integral to the normal operation of the source. Potential emissions shall be based on maximum rate capacity.
- 2. "Air Contaminant" shall mean particulate matter, dust, fumes, gas, mist, radionuclides, smoke, vapor, or odorous substances, or any combination thereof, but does not include water by itself.
- 3. "Sludge lagoon" can be used interchangeably with pond, sludge pond, anaerobic treatment lagoon ("ATL"), and/or impoundment. In this request, sludge lagoon is defined by any outdoor reservoir into which digestate from an anaerobic digester is placed.
- 4. "Initial Information Request" shall mean the "Request to Provide Information Pursuant to the Clean Air Act" issued by US EPA to Renergy on October 4, 2021.

## Appendix B

# **Information You Are Required to Submit to EPA**

Renergy must submit the following information pursuant to Section 114(a) of the CAA,

42 U.S.C. § 7414(a).

- 1. State, for each sludge lagoon at the Dovetail, Emerald, and Steamtown facilities, from the date the facilities began operating to the present, whether Renergy claims de minimus emission status and if so, provide all documentation Renergy maintains regarding the claimed de minimis status.
- 2. Provide calculations performed by Renergy regarding the air emissions and/or potential to emit from each sludge lagoon at the Dovetail, Emerald, and Steamtown facilities since the facilities began operating, including calculations for all waste streams the digesters are designed to handle such that there are calculations for the potential to emit for instances in which the digesters receive only food waste, only biosolids, only animal waste, and finally a combination of these streams as specified in the facilities' respective, most recent PTIO applications. Provide all date(s) on which these calculations were finalized. If no historic calculations are available, state this and conduct and provide the calculations to US EPA within the timeframe required by this Information Request.
- 3. Provide all Clean Air Act related permit applications for Dovetail, Emerald, and Steamtown.
- 4. Provide the following information regarding the flares at the Dovetail and Emerald facilities:
  - a. For each facility, Dovetail and Emerald, provide the hourly records of the total volume of natural gas and digester gas in MMSCF sent to the engine and flare from April 2018 through the date of receiving this request. If hourly records are not available, provide daily data. If daily records are not available, provide weekly data.
  - b. Provide the hourly volumetric gas flowrates into each flare at Dovetail and Emerald from April 2018 through the date of receiving this request. If hourly data is not available, provide daily, weekly, monthly, or annual data, prioritizing the smaller time frame and opting for the next only if the prior data set is not available.
  - c. Provide the calculations for each flare's exit velocity during the 2021 average flow and during the 2021 maximum hourly flow. Additionally, provide the calculation of each flare's corresponding Vmax (maximum velocity) during these two periods.
  - d. Provide the results from the upcoming stack tests to be performed to determine exit velocity and Vmax at each flare at Dovetail and Emerald, as discussed in Renergy's call with EPA on March 8, 2022.

- e. Provide the hourly Methane % data for each flare at Dovetail and Emerald from April 2018 until the receipt of this request. If hourly data is not available, provide daily data
- f. Verify the monthly Methane % data for each flare at Dovetail and Emerald provided for October 18, 2021 through February 28, 2022. Verify that the Methane % was measured in the thousands, and if verified, provide a reason for this high measurement. If not verified, provide corrected monthly Methane % data for this time frame.
- g. Provide the hourly H2S data for each flare at Dovetail and Emerald from April 2018 until the receipt of this request. If hourly data is not available, provide daily data.
- h. Provide a narrative explaining how the Net Heating Values provided by Renergy for Dovetail and Emerald in Response #22 of Renergy's Initial Information Request response were calculated in accordance with 40 C.F.R. § Part 60.18, as required by each facility's permit.
- i. Additionally, provide documentation or evidence of Renergy's determination that the net heating value of methane (BTU/scf) should be 1011 BTU/scf.
- 5. For both Dovetail and Emerald, calculate the current, present-day average Solids Retention Time (SRT) and temperature range in the anaerobic digester. Provide results, calculations, and supporting documentation. Additionally, provide any historic average SRT and temperature range results, calculations, and supporting documentation generated within the last five years.
- 6. For both Dovetail and Emerald, calculate current, present-day Volatile Solids Reduction (VSR) values for the anaerobic digester. Provide results, calculations, and supporting documentation. Additionally, provide any historic VSR values, calculations, and supporting documentation generated within the last five years.
- 7. Test the sludge entering each lagoon at the Dovetail, Emerald, and Steamtown facilities for maximum true vapor pressure as defined by 40 CFR § 60.111b. Provide results for maximum true vapor pressure in kilopascals (kPa).
- 8. Provide all test results, reports, and studies that indicate the organic and inorganic composition of sludge exiting the anaerobic digesters at the Dovetail and Emerald facilities since the facilities began operating. This includes, but is not limited to, digestate discharge monitoring reports (DMRs) submitted to Ohio EPA.
- 9. Provide a statement on how sludge enters each lagoon at the Dovetail, Emerald, and Steamtown facilities. Provide details such as specifying submerged or non-submerged loading, type of receptacle (via hose, truck, etc.), and any other pertinent loading details.
- 10. Provide a statement on how long sludge remains in each lagoon at the Dovetail, Emerald, and Steamtown facilities. If there is a removal process for lagoon components, provide a description of what that entails. Provide any removal protocols for solid sludge and state

where the removed material goes. Provide a detailed description of the chemical reactions that are taking place at the water barrier on top of the lagoon. Describe why Renergy has opted to not use aerators on any of the sludge lagoons.

- 11. Provide, for each sludge lagoon at the Dovetail, Emerald, and Steamtown facilities, all records of historical calculations and tests of the following parameters, from the time the anaerobic digesters at Dovetail and Emerald commenced operation through the time biosolids were introduced to the sludge lagoons: pH, alkalinity (mg/L as CaCO<sub>3</sub>), Volatile Fatty Acids (mg/L as acetic acid), sulfate (as SO<sub>4</sub>, in mg/L) and biological oxygen demand (BOD<sub>5</sub>, in mg/L). Provide calculations, results, and analytical methods used.
- 12. Perform a test of each sludge lagoon at the Dovetail, Steamtown, and Emerald facilities to represent current, present-day conditions for the following parameters: pH, alkalinity (mg/L as CaCO<sub>3</sub>), Volatile Fatty Acids (mg/L as acetic acid), sulfate (as SO<sub>4</sub>, in mg/L) and biological oxygen demand (BOD<sub>5</sub>, in mg/L). Use the EPA methods as specified in 40 C.F.R. § 136.3 Table 1B. Provide calculations and results.
- 13. With regard to all sludge lagoons at the Dovetail, Emerald, and Steamtown facilities:
  - a. Provide the target food-to-biomass ratio for the anaerobic digesters and lagoons; provide all measured values for the years 2020 through 2022; and test for current actual values and provide the results; and
  - b. Provide target dissolved oxygen concentration (mg/l) in the sludge lagoons; provide all measured values for the years 2020 through 2022; and test for current actual values and provide the results.